

Amendments to the Specification:

On page 5, please replace the first paragraph on lines 1-9 with the following amended paragraph:

Figure 2 is a block diagram of a settop terminal **17** with ~~the~~ a universal modulator **19** shown coupled to the ~~output~~ outputs 23, 25, 27 of a demodulator/decoder **21**. The demodulator/decoder **21** ~~outputs~~ supplies a customer's channel selection to the universal modulator 19 as a baseband audio signal via the output **23** and as a baseband video signal via the output 25. ~~The functional description of the demodulator/decoder 21 is beyond the scope of the present invention 19 and shall not be described.~~ An alternate (second) audio source signal **27**, such as a NICAM carrier or modulated audio signal which differs from the baseband audio signal, may also be supplied ~~and to the universal modulator 19~~ via the output **27** of the demodulator/decoder **21** **29**. A reference clock signal 37 originating from a master oscillator (not shown) and a common communication bus 39 are also coupled to the universal modulator 19. The functional description of the demodulator/decoder 21 is beyond the scope of the present invention and shall not be described in further detail.

On page 5, please replace the second paragraph on lines 10-16 with the following amended paragraph:

The higher quality baseband audio **23** and video **25** signals provided by outputs **23** and **25** of the demodulator/decoder **21** are made available as settop terminal outputs **31**, **33**, respectively, and may be coupled to television receivers that have baseband inputs. The alternate audio signal provided by output **27** may be made available as settop terminal output **29**. For television receivers that lack these features ~~this feature~~, the universal modulator **19** provides an up-conversion output **35** compatible with the television broadcast standard used, from baseband to VHF or UHF for coupling to an antenna input.

On page 5, please delete the third paragraph on lines 17-21.

On page 6, please replace the paragraph on lines 9-27 with the following amended paragraph:

The communication bus protocol permits configuring component parameters to a particular broadcast standard using a unique addressing system within the settop terminal **17**. As shown in **Figure 3**, the I²C bus **39** communicates with: a

~~baseband audio~~ an addressable programmable PLL frequency synthesizer 41 ~~for a~~
~~baseband audio mixer 69~~, a solid state switch ~~second audio carrier switched input~~
43, adjustable amplifiers for the baseband video input 45 and baseband audio input
47, a an addressable programmable PLL frequency synthesizer 49 for an up-
conversion ~~up-converter~~ mixer 91 and a an addressable programmable PLL
frequency synthesizer 51 for a down-conversion ~~down-converter~~ mixer 101.
Although ~~third~~ the addressable programmable PLL frequency synthesizer 51 has
been described as being coupled to a ~~"down-converter"~~ "down-conversion" mixer 101,
the ~~down-converter~~ down-conversion mixer 101 may in fact further up-convert ~~the a~~
HI-IF signal 93 to a higher frequency signal. It should be noted that each PLL
frequency synthesizer 41, 49, 51 has an associated oscillator driver L01, L02, L03
respectively (not shown). Each respective component has its own address to permit
firmware contained parameters to be loaded for a given broadcast standard
configuration.

On page 7, please replace the paragraph on lines 1-23 with the following amended
paragraph:

An ~~The~~ alternate (second) audio carrier input 53, ~~modulated provided by the~~
output 27 of the demodulator/decoder 21, is coupled to the solid state switch 43.

The output of the switch **43** is coupled to a first input **55** of a summing amplifier **57**. The baseband video input **59** is coupled to a clamp **61** which limits signal amplitude. The output from the clamp **61** is coupled to the video adjustable amplifier **45** where signal gain is increased or attenuated depending upon the broadcast standard. The output from the adjustable amplifier **45** is coupled to a hard limiter **63** which clips signal peaks. The output from the limiter **63** is coupled to a second input **65** of the summing amplifier **57**. The baseband audio input **67** is coupled to a baseband audio mixer **69** via an adjustable amplifier **68**. The baseband audio mixer **69** modulates the baseband to the broadcast standard. The baseband audio mixer **69** may be selectively activated or deactivated by the I²C bus as required to support the standard in use. The output from the baseband audio mixer **69** is coupled to a lowpass filter **71** to remove RF. A second input to the audio lowpass filter **71** is provided as a modulated audio input **72**. The audio lowpass filter **71** is coupled to an audio adjustable amplifier **47** where signal gain is increased or attenuated. The audio adjustable amplifier **47** output is coupled to a third input **73** of the summing amplifier **57**.

On pages 9, please replace the paragraph on lines 5-12 with the following amended paragraph:

Referring back to **Figure 3**, the summer amplifier **57** output is modulated with the frequency output from the second programmable PLL **49** to drive the up-conversion mixer ~~modulator~~ **91** and translate the summed output to a high intermediate frequency (HI-IF) **93**. The HI-IF **93** is higher than the highest expected frequency in the summed amplifier **57** output bandwidth. In the present invention **19**, the input to the ~~up-converter~~ up-conversion mixer **91** is not bandwidth limited.

On pages 9-10, please replace the paragraph beginning on line 13 of page 9 and ending on page 10, line 7 with the following amended paragraph:

The summing amplifier **57** output frequencies are translated to a new bandwidth, starting at a low frequency of the second PLL **49** minus the highest input band frequency, and ending at a high frequency of the third PLL **51** minus the lowest input band frequency. The second PLL **49** frequency is selected to translate the summing amplifier **57** output to correspond to the passband of an intermediate lowpass filter **95**. The output from the lowpass filter **95** is coupled to a buffer amplifier **97** to restore gain losses. The output from the buffer amplifier **97** is input to a final lowpass filter **99**. The buffer amplifier **97** maintains the system noise figure by overcoming the losses in the up-conversion mixer **91** and first HI-IF filter

95. The signal is filtered by a ~~HI-FI~~ HI-IF filter **99**, with the output coupled to a down-conversion mixer **101**. The third PLL synthesizer **51** is coupled to the down-conversion mixer **101**. The difference between the HI-IF **93** and the third PLL **51** frequency is the desired output channel in the IF band. It should, however, be noted that the down-conversion ~~down-converter~~ mixer **101** may accept the HI-IF **93** and further up-convert the signal to a higher frequency RF signal. The output is then filtered via a low pass filter **103**, (or other appropriate filter if up-converted), and forwarded as an RF output frequency **105** for reception by a television receiver.

Please replace the Abstract with the following: